## (19) World Intellectual Property Organization International Bureau





## (43) International Publication Date 25 April 2002 (25.04.2002)

### **PCT**

# (10) International Publication Number WO 02/33873 A2

(51) International Patent Classification7:

----

H04L

- (21) International Application Number: PCT/US01/32609
- (22) International Filing Date: 18 October 2001 (18.10.2001)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

09/692,535

19 October 2000 (19.10.2000)

- (71) Applicant and
- (72) Inventor: BARFIELD, Steven, T. [US/US]; 5140 Hyatt Drive, Acworth, GA 30101 (US).
- (74) Agent: MAYNARD, Jeffrey, C.; Draughon Professional Association, One Independent Drive, Suite 2000, Jacksonville, FL 32202 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Declarations under Rule 4.17:

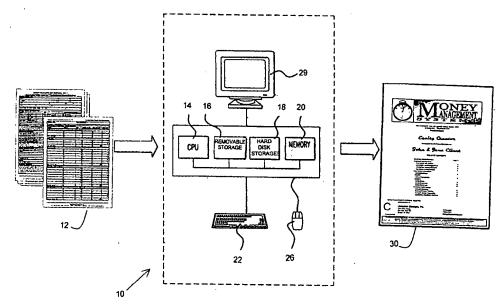
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

### Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

### (54) Title: SYSTEM AND METHOD FOR FINANCIAL PLANNING



(57) Abstract: A computer implemented tool used for financial analysis whic hproduces a plan to eliminate consumer debt and estimates values of needed savings levels and insurance based on certain economic assumptions and data regarding an individual consumer's current financial status. User preferences are taken into account. Output is presented in a textual or graphical format that can be easily understood by customers. A third party administator is used to free the customer from the time-consuming act of check writing.



33873 A

# System and Method for Financial Planning BACKGROUND OF THE INVENTION

### FIELD OF THE INVENTION

5

15

20

25

The present invention relates to a process and method for implementing an individualized plan for debt management, equity creation, and financial needs analysis. In its more particular embodiments, the present teachings specifically pertain to a computer assisted system and method for instituting a debt acceleration and financial needs analysis program to help a customer build equity in a home and eliminate debt while maintaining cash flow within preexisting budgetary limits.

### 10 BACKGROUND OF THE PRIOR ART

Consumer debt has been steadily increasing over the past several years and the challenge of controlling debt is a concern for many people. Although the percentage of home ownership is likewise increasing, the amount of equity held by the average consumer is very limited. Many consumers are financially in debt. As such, they do not have sufficient savings and/or insurance to sustain them should a primary breadwinner become unable to work because of injury, layoff or death. Nor do many of those same debt-ridden consumers have retirement plans or life insurance needs identified and fulfilled.

A number of financial products are available to help consumers plan for retirement or invest in a variety of financial instruments. Several such products are disclosed in U.S. patents that disclose systems designed to implement a retirement planning program; for example, a computer program is available for coordinating financial resource management utilizing annuity investments, which grow tax-deferred. The computer program is utilized in a system to administer resources according to predetermined criteria, to track performance of the resources and control

withdrawal of resources based on predetermined time or other criteria. The system does not, however, identify how a client practicing such program comes into possession of such resources, necessary to begin such investments.

Another program discloses a computerized method designed to provide guaranteed lifetime income. An initial investment is divided into two investment instruments. The first instrument is designed to provide periodic distributions, and is able to be liquidated. The second instrument provides lifetime periodic distributions such as a life contingent annuity. Such method presupposes the existence of financial assets in order to fund such initial investment.

5

10

15

20

25

Several patents, all to Atkins, disclose a personal management program centered on a particular type of mortgage that features a variable amortization schedule. The client pays only the interest accrued against the mortgage and then has the option to use funds that would have been used to amortize the mortgage toward a pension or retirement plan. Such a program is designed to spread a client's payments out over the full life of the mortgage, resulting in no interest savings and delayed equity growth.

Another program, primarily concerned with retirement planning discloses a computer system for predicting needed savings based on certain economic assumptions. Using various rates of return, the software predicts a best age to retire based upon a preselected future standard of living.

Each of those patents is specifically concerned with planning for retirement. None of them, however, discloses a debt management, financial needs analysis program, such as the present teachings, to address problems associated with coordinated financial planning, such as, equity growth, emergency fund allocation, life insurance, and debt elimination.

### SUMMARY OF THE INVENTION

An object of the present invention is to enable a vehicle for analysis of a consumer's debt load for purposes of eliminating such debt. A more specific objective is to provide a debt consolidation vehicle for a consumer.

5

10

20

25

Another object of the present invention is to enable a vehicle for analysis of a consumer's financial equity holdings for purposes of increasing such equity. A more specific object is to provide a method for a consumer to build equity in real property by accelerated mortgage payments. A related object is to provide a system that will allow a client to pay off a mortgage and other debt, secured or unsecured, without increasing the total of monthly payments made to all creditors.

Another object of the present invention is to enable a system of debt management that maintains a monthly allocation of consumer funds by creating a cash flow margin and paying off high interest debt.

A further object is to enable a vehicle for presenting a method for the creation
and maintenance of an emergency fund.

Another object is to enable a method for forecasting and funding a retirement plan. A more specific objective of the present invention is to evaluate income, inflation and financial objectives in forecasting a retirement plan.

Another object of the present invention is to provide a method for allocation of funds to create an Emergency Fund and increase Retirement Savings by repositioning assets.

A further object of the present invention is to enhance management of debt payments to more effectively and efficiently handle financial transactions. A related object is to incorporate a third party administrator for paying a client's debts to automatically match the analysis derived from the program taught herein.

A further object is to enable users of the customized software taught herein to compile reports within specified parameters and designate an output format, in a graphical or textual presentation for such report. A more specific object is to enable a vehicle to present a consumer's current financial condition and accurately forecasts the amount of time to be debt free while illustrating the amount of savings attributed to interest payments and the amount of growth associated with retirement savings.

5

10

20

25

Most existing debt consolidation programs effectively consolidate preexisting consumer debt; unfortunately, most programs actually increase the consumer's overall debt load, measured as a function of total interest to be paid to lenders, by expanding payments over a longer period of time. Mortgage acceleration programs generally address only the acceleration and elimination of the home mortgage, but do not address elimination of higher interest rate, non tax-advantaged debt, whether secured or unsecured, such as credit cards and car loans. Prior art financial needs analysis programs for the purpose of forecasting insurance and retirement requirements typically do not provide for the budgeting of finances actually needed to purchase insurance or provide for retirement income. Existing programs that do provide budgeting analysis generally do not provide for the identification and importance of debt, insurance, retirement, and liquid assets. No program is known to exist that coordinates debt consolidation, mortgage acceleration, needs analysis and budgeting in a comprehensive system. Present teachings provide for consolidation and elimination of consumer debt utilizing the savings attributed to consolidation of such debt for lowering the total debt load and aggregate interest paid for outstanding debt. Present teachings also provide for acceleration of mortgage payoff only after elimination of other non tax-advantaged debt to maximize interest savings and tax Additionally, the method taught herein coordinates a comprehensive benefits.

financial needs analysis program by not only forecasting insurance and retirement needs, but also providing for budgeting for such needs through debt consolidation and a disciplined payment system.

### BRIEF DESCRIPTION OF THE DRAWINGS

- The above and other features, aspects, and advantages of the present invention are considered in more detail, in relation to the following description of embodiments thereof shown in the accompanying drawings, in which:
  - FIG. 1 is a system diagram of an exemplary embodiment of the present invention;
- FIG. 2 is a block diagram illustrating components of a computer system embodiment of the invention;
  - FIG. 3 is an illustration of a portion of a questionnaire for obtaining data to enable an embodiment of the invention;
  - FIG. 4 is a general arrangement presentation in the form of a block diagram for describing a computer system embodiment of the invention;

- FIG. 5 is a block diagram presentation for a more detailed description of operational steps, of a portion of the embodiment of FIG. 4, for carrying out debt analysis and debt acceleration functions of the invention;
- FIG. 6 is a block diagram presentation for a more detailed description of operational steps, of a portion of the embodiment of FIG. 4, for carrying out debt consolidation and equity creation functions of the invention;
  - FIG. 7 is a block diagram presentation for describing in more detail operational steps, of a portion of the embodiment of FIG. 4, for carrying out additional features of the invention; and

FIG. 8 is a more detailed block diagram presentation of operational steps, performed by a portion of the embodiment of FIG. 4, for describing functions of an alternate embodiment of the invention.

## **DETAILED DESCRIPTION OF THE INVENTION**

5

10

15

20

The invention summarized above and defined by the enumerated claims may be better understood by referring to the following detailed description, which should be read in conjunction with the accompanying drawings in which like reference numbers are used for like parts. This detailed description of an embodiment, set out below to enable one to build and use an implementation of the invention, is not intended to limit the enumerated claims, but to serve as a particular example thereof. Those skilled in the art should appreciate that they may readily use the conception and specific embodiment disclosed as a basis for modifying or designing other methods and systems for carrying out the same purposes of the present invention. Those skilled in the art should also realize that such equivalent assemblies do not depart from the spirit and scope of the invention in its broadest form.

In a preferred embodiment, a customer fills out a Pre-Qualification Request/Data Sheet with information about the customer and his or her present financial position. The request sheet can be in electronic form (e.g., completed at a computer by entering information that is displayed in an electronic form on the screen of the computer) or in printed form.

Representative information requested includes age, current monthly income, current personal savings, current real estate, current mortgage(s), life insurance, household loans and debts, such as credit cards, revolving charge accounts and the like, and other anticipated expenses.

Data obtained from such information is supplied to a software program, customized in accordance with present teachings, for processing. The present invention uses such supplied data in a software program to establish a plan to extinguish outstanding debt. In an alternate embodiment, the present invention also estimates how much the customer should save as an emergency fund, as a hedge against unexpected disability or loss of employment. In a further alternate embodiment, the present teachings determine how much such customer should save, on a monthly basis, each year until retirement.

5

10

15

20

The overall output of the software used for financial needs analysis includes a plan for eliminating consumer debt, increasing equity holdings, forecasting emergency fund needs, and forecasting retirement savings requirements within such customer's preexisting monthly budget. In a preferred embodiment, based on the information provided by the customer, a pathway to financial independence is identified.

The present invention, using the input from the customer, creates a customized financial analysis plan for the customer. The present invention helps the customer determine the best method to eliminate consumer debt, how much money the customer will need in retirement, what amount the customer's savings can provide, and how much the customer should be saving now. In addition, the customer is provided with information concerning needs for an emergency fund and insurance.

The system and method taught herein, provide a consumer with a simple, yet comprehensive, customized debt, emergency fund, insurance, and retirement savings management and forecasting analysis that will structure the consumer's financial goals within a preexisting monthly budget.

Referring now to the drawings, there is presented a system overview of an exemplary embodiment of the present invention. In a specific embodiment, illustrated in figure 1, a computer system (indicated generally as 10) provides software, customized in accordance with present teachings, to enable an operator to select from a plurality of options, which are further shown and described in more detail in relation to figures 4 - 8.

Information about a customer's financial position is collected from the customer. Typically, such customer is provided with a Pre-Qualification Request/Data Sheet 12 to complete, which may be a paper form, or alternatively, may be in electronic form.

10

15

20

In a preferred embodiment of the present invention, a customer completes the Pre-Qualification Request/Data Sheet 12 identifying all debt instruments, including interest rate and monthly payment. The customer also provides information related to current income, saving, and spending levels.

The information in the Pre-Qualification Request/Data Sheet 12 is used as input to a computer program, i.e., the software customized in accordance with the present teachings, executing in computer system 10. In a preferred embodiment, computer system 10 comprises a central processing unit (CPU) 14 executing computer programs and managing and controlling the operation of computer system 10. A removable storage device 16, such as a floppy disk drive, is coupled to central processing unit 14 for, e.g., reading and writing data and computer programs to and from removable storage media such as floppy disks. Hard disk storage device 18, coupled to CPU 14, also provides a means for storing computer programs and data. Such storage device preferably provides high storage capacity. Computer system 10

includes typical input/output devices, such as, for example, keyboard 22, mouse 26 and monitor 29.

The computer system 10 (executing the software customized according to present teachings) processes the customer's information from the Pre-Qualification Request/Data Sheet 12 and provides the customer with output report 30. The report 30 may be printed by the computer system 10 or may be provided electronically to the customer or the customer's financial advisor, e.g., via the Internet, on disk, on a computer screen. The report 30 provides the customer with a customized pathway to financial independence.

5

10

15

20

Referring to figure 2, the computer system of the present invention comprises both hardware and software elements. The hardware comprises central processing unit 14, including math coprocessor 33 which, depending on the CPU model used, may be separate from CPU 14 or a part thereof, digital memory 20 comprised of one or more RAM memory devices 35 and ROM memory devices 36, and other magnetic or optical memory storage devices including hard disk storage 18 and one or more floppy disk drives 16. The hardware also includes a keyboard 22, mouse 26, monitor 29 and a printer 40.

The hardware used in connection with the present invention can be an IBM-compatible personal computer having a 80486 model CPU or higher, which incorporates a math coprocessor, a color VGA display monitor, at least 4 MB of RAM memory, and a hard disk accessible locally or over a network. The personal computer is operated by the MS-DOS® operating system or the Windows® operating system version 3.1 or higher, both available from Microsoft Corporation of Redmond, Wash. The invention may be practiced in other computer environments, such as the

Macintosh® personal computer environment available from Apple Computer of Cupertino, Calif.

Some of the software for the program taught herein is a spreadsheet operable with the Excel spreadsheet program available from Microsoft Corporation. The formulas for the spreadsheet cells necessary to implement the present invention are set forth in the Spreadsheet Appendix attached hereto. One skilled in the art will recognize that many other spreadsheet or programming languages may be utilized to implement the present invention, such as the Lotus 1-2-3 spreadsheet program available from Lotus Development Corporation or APLII programming language. The formulas listed in the Spreadsheet Appendix may be used by one skilled in the art to program a spreadsheet or to write source code using any conventional programming language to implement the present invention.

10

15

20

25

that a customer completes. As shown, the customer is asked to provide certain basic information concerning the customer and, where applicable, the customer's spouse. Such general information 45 includes, for example, name of the customer and the customer's spouse, respective dates of birth, social security numbers, a street address, and home and work telephone numbers. The customer is also asked to provide information related to: monthly income and expenditures 47; emergency fund savings 49; retirement savings 50, including money the customer and the customer's spouse is saving through their respective workplaces; and life insurance 52 (both term and permanent) including current balances and current value. Additional program data includes loan information 54, such as real estate (e.g., the value of the customer's home and other property, mortgage balances, and rental payments) and monthly housing expenses 55.

Detailed monthly debt data is also requested, including: first mortgage 60; second mortgage 61; installment and household loans 63, such as student loans; credit cards and revolving debt 65; and other monthly expenses 67, which may include anticipated expenses (including, for example, medical expenses and the cost of college education for children).

Once the customer completes the Pre-Qualification Request/Data Sheet 12, the information is used as input data, as described above, to the software for financial analysis executed on computer system 10. The responses may be input directly by the customer (e.g., at a computer in a financial advisor's office or at a home computer) or by a data entry operator.

Figure 4 is a general schematic representation of a high-level flow chart for carrying out a specific embodiment of the invention.

10

15

20

25

Data acquired from the customer is input to the program at 70. Step One, indicated as 73, involves analysis of the customer's current debt situation. In this step, the actual payments made to reduce outstanding principle are cumulated to calculate the total amount of interest paid over the life of the outstanding debt 75 (figure 5) and the total time required to extinguish all outstanding debt 77 (figure 5) using the total actual payment value.

Step Two, indicated as 79, involves determination of an Emergency Fund for the customer. The purpose of an Emergency Fund is to enable a means to continue to pay debts as they come due even if the principle earner is unable to work, and for bona fide emergencies. Initially the recommended value of the Emergency Fund is set to the total of minimum required monthly expenditures. A preferred value for the Emergency Fund is set to three times the total of minimum required monthly expenditures. A family needs at least three to six months worth of expenses set aside

for emergencies, loss of income due to work related occurrences and other unexpected events. Such Emergency Fund is not for vacations or any other non-necessities that arise from time to time. A purpose of the Emergency Fund is to ensure that when existing debts are extinguished, through methods taught herein, the debts do not occur again. In this step the current value of Emergency Fund savings is compared to the recommended value to determine how much is needed 81 to satisfy the initial recommended value for the Emergency Fund. The program also calculates the amount of time 83 an existing fund, if any, will last.

At Step Three, indicated as 85, a recommended amount of insurance is projected to ensure that debts can continue to be paid if the primary breadwinner is taken away unexpectedly. Such insurance can include life insurance, health insurance, disability insurance, long-term care insurance, and the like. A preferred face amount of life insurance needed 87 for a principle breadwinner is approximately 12.5 times annual income. For a spouse with no income, the recommended face amount of life insurance should be at least \$50,000. In this step, the program calculates the amount of time 89 current life insurance holdings, if any, will be able to replace lost income.

10

15

20

Step Four, indicated as 91, involves analysis of the customer's retirement savings. The program projects lump sum amount of dollars 93 necessary to completely replace all income, in present day dollars at time of retirement, based on a predetermined rate of inflation and a proposed age at retirement. The program further projects the amount of dollars 95 needed to be saved or invested each month, based upon a predesignated rate of return on investment, in order to obtain the retirement lump sum needed 93.

Steps One through Four are used to analyze a customer's financial condition and project the customer's financial needs in retirement without relying on Social Security, but may include pension plans associated with the customer's employment. Those steps identify the customer's financial problem, which is where most financial needs analysis programs stop. The next several steps are used to enable a workable solution based on analysis and identification of needs. The software, customized according to present teachings, enables a plurality of embodiments, which can provide output in several phases of operation depending on the preferences of the customer. A feature of the present invention is that the amount of money paid each month remains essentially constant for the duration of the recommended pathway to financial independence.

5

10

20

25

In one embodiment, Phase I 99 enables a debt acceleration program. No additional debt is incurred to pay off existing outstanding debt. The program analyzes the customer's current debt to determine if there is any available cash flow margin. Margin is defined as an amount of money expended monthly in excess of required minimum monthly payments. In Phase I, margin is created internally by reducing actual monthly payments to minimum monthly payments required by each creditor. The margin is applied to accelerate one debt at a time. When a first debt is extinguished, the monthly outlay remains the same, but the margin increases. Such increased margin is applied to another debt until it is paid off, and then to each debt in turn until all debts have been extinguished.

Report 30 (figure 1) is produced at station 100. Such report 30 includes the Current Debt Analysis from Step One 73 and the recommended Emergency Fund 79, Required Protection 85, and Retirement Savings 91. Report 30 also includes the recommended procedure for debt acceleration from Phase I 99. Phase I 99 computes

a revised time in debt 101 based on accelerated debt repayment and projects the actual month and year when existing debt is extinguished under the recommended plan. The amount of interest paid 103 following the Phase I recommendation is calculated for comparison to the amount of interest to be paid, without debt acceleration based on current debt condition 75. A fee for use of the analysis can be calculated based upon a percentage of the amount of interest saved, or in any other manner.

Commonly available plans to eliminate debt involve use of a debt consolidation loan, typically a first mortgage refinancing or a second mortgage that takes out the equity owned in real property to pay off higher interest debt. Such a plan merely swaps unsecured debt for secured debt such that the total interest paid actually increases and the time to finish paying both loans increases. Most companies advertise putting cash back into the customer's hands. Typically, such newly freed-up cash eventually goes to create new debt, such as a new car payment or household furnishings, placing the customer in a more debt-laden position than initially started. Figure 6 illustrates a portion of the program at station 105 enabled by the present teachings wherein the flaw in conventional debt consolidation loan plans is demonstrated. The program calculates a new time in debt 107 associated with a typical debt consolidation loan, and calculates a new total of interest to be paid 109 throughout the life of such new debt consolidation loan.

10

15

20

25

The second phase of the pathway to financial independence is enabled by alternate embodiments of the present invention. The second phase is predicated upon the existence of at least one home mortgage included in the customer's debt burden.

An additional embodiment of the present invention, referred to as Equity Creator 111, is described with reference to figure 6. The program creates a rapid methodology to eliminate all debt, including a home mortgage. In this embodiment,

the program creates a margin by identifying a source of cash, such as a second mortgage loan and a predetermined order of debt payment in order to maintain the monthly expenditure of funds approximately constant while repaying such second mortgage and any remaining outstanding debt. A portion of such new loan 113 is applied to establish an Emergency Fund as described previously in Step Two 79 (figures 4 and 5) using a lump sum cash input, if necessary. The remainder of such new loan is applied to pay off as much of the outstanding debt as possible. No additional monthly resources are reallocated to Step Three 85 or Step Four 91. Margin that is created by paying off such debts is applied 115 to accelerate one remaining debt at a time. When a first debt is extinguished, the monthly outlay remains the same, but the margin increases. Such increased margin is applied to another debt until it is paid off, and then to each debt in turn until all debts have been extinguished. Eventually such increased margin is applied to accelerate repayment of such second mortgage and then to accelerate repayment of the first mortgage. Using input considering such new loan, the program calculates and reports to the customer the remaining time in debt 117 and the total interest to be paid 119, including the new loan, for comparison to the amount of interest to be paid, without debt acceleration based on current debt condition 75 (figure 5).

10

20

In a further embodiment, described with reference to figure 7, the steps and features of the Equity Creator 111 (figure 6) embodiment are improved upon by Equity Creator plus 120. This embodiment employs debt elimination and acceleration principles hereinbefore described, including an initial lump sum allocation to an Emergency Fund, if necessary. In this embodiment, however, a portion of the monthly margin created is dedicated to each of the following:

a) the Emergency Fund 121, in order to continue to build its value. Such Emergency Fund is considered fully funded when its value is at least six times the total of minimum required monthly expenditures;

- b) a budget established for Proper Protections 123. The purpose of such budget is to pay monthly premiums associated with recommended life insurance, health insurance, and the like; and
  - c) a budget established for Retirement Savings 125.

10

15

20

25

Debt elimination and acceleration continues as previously described. The margin that is created, albeit somewhat smaller, is applied to accelerate one remaining debt at a time. When a first debt is extinguished, the monthly outlay remains the same, but the margin increases. Such increased margin is applied to another debt until it is paid off, and then to each debt in turn until all debts, including such first and second mortgage have been extinguished. Once all debts have been paid off, all available margin is then applied to continue to build the Retirement Savings account. The Retirement Savings account may be in the form of a standard bank deposit account or in the form of an investment account, such as a mutual fund, stocks, certificate of deposit, and the like, as desired by the customer.

The individual customized plan developed by the software program taught herein, provides recommendations for the amount of insurance required to protect against loss of income and the amount of savings required to replace monthly income upon retirement. Specific investment vehicles and insurance policies should be selected by the customer with the advice of a salesman or broker.

Using input considering such new loan and the above described allocation to Steps Two through Four, the program calculates and reports to the customer the remaining time in debt 127 and the total interest to be paid 129 including the new

loan, for comparison to the amount of interest to be paid based on current debt condition 75 (figure 5). The output report 30 further includes a projected value of the Retirement Savings Account at the estimated time of retirement based on a predetermined rate of growth.

In an alternate embodiment, described with reference to figure 8, the steps and features of the Equity Creator *plus* 120 (figure 7) embodiment are improved upon by Equity Creator *max* 131. This alternate embodiment employs the debt elimination and acceleration principles previously described, including an initial lump sum allocation to an Emergency Fund, if necessary, and allocation of a portion of the created monthly margin to each of the following:

a) the Emergency Fund 121;

5

10

15

20

25

- b) a budget for Proper Protections 123; and
- c) a budget for Retirement Savings 125.

Debt elimination and acceleration continues as previously described. The margin that is created, albeit somewhat smaller, is applied to accelerate one remaining debt at a time. When a first debt is extinguished, the monthly outlay remains the same, but the margin increases. Such increased margin is applied to another debt until it is paid off, and then to each debt, except the first mortgage, in turn until all other debts have been extinguished. Once all debts, except the first mortgage, have been paid off, all remaining margin is then applied to continue to build the Retirement Savings account. The first mortgage debt is not accelerated because some investments associated with the Retirement Fund and Emergency Fund may realize a greater rate of return than the customer's first mortgage. The current Internal Revenue Code permits a taxpayer to deduct the amount of mortgage interest paid to a lender from such taxpayers gross income. At the same time, investment growth is

included as ordinary income, for which income tax must be paid. In an effort to retain the tax advantage of the first mortgage interest, that mortgage is not accelerated under the Equity Creator *max* embodiment of the present invention.

Using input considering such new second mortgage loan and the above described allocation to Steps Two through Four, the program calculates and reports to the customer the remaining time in debt 133 and the total interest to be paid 135 including the new loan and remaining first mortgage, for comparison to the amount of interest to be paid based on current debt condition 75 (figure 5).

5

10

15

20

25

Another feature of the invention taught herein is the comprehensive report 30 generated at station 140 (figure 4). The software enabled by the present teachings includes generation of graphical displays, in bar graph and pie graph form to illustrate the output of each embodiment of the program, including:

- a) the precise month and year that all debts can be extinguished while maintaining the monthly expenditure of funds substantially constant;
- b) the amount of interest that can be saved while practicing the method of the program;
- c) the recommended value for an Emergency Fund and a method to achieve such recommended value while maintaining the monthly expenditure of funds substantially constant;
- d) the recommended amount of Proper Protection required to insure against loss and a method to fund such recommended amount while maintaining the monthly expenditure of funds substantially constant; and
  - e) the minimum Retirement Fund required to maintain a constant relative income after retirement while maintaining the monthly expenditure of funds substantially constant.

An additional feature of the present teachings is the use of a third party administrator to carry out the act of making required monthly payments. Typically, such monthly payments are made by a bank draft, such as a check, written by a customer to each creditor. A third party administrator takes the place of the customer for the act of making payments. Additionally, the checks are replaced by a preauthorized paper draft. The customer directs the third party administrator to prepare and send such pre-authorized drafts on specific dates. When a debt is extinguished according to the program established by the present invention, the third party administrator automatically adds the increased margin to the next debt to be paid, according to the program.

5

10

15

While specific values, relationships, components and steps have been set forth for purposes of describing concepts of the invention, it should be recognized that, in the light of the above teachings, those skilled in the art can modify those specifics without departing from basic concepts and operating principles of the invention taught herein. Therefore, for purposes of determining the scope of patent protection, reference shall be made to the appended claims in combination with the above detailed description.

### SPREADSHEET APPENDIX

```
Definitions:
X = timeline (time lapsed from beginning of program)
Y = incremental potential interest
Yn= total potential interest
Yo = total potential interest from client's current payment scheme
S = total potential interest saved
N = ORIGINAL number of payments for a particular loan
Na = adjusted number of payments
Nn = New number of payments (after margin added)
A = ORIGINAL principle amount
An = adjusted principle amount upon entering accelerated phase
P = ORIGINAL Periodic payment amount
Pn = margined periodic payment
I = interest (monthly amount APR/12)
M = margin created
m = minimum payment
Formulae:
N = (\log (P/(P-A*I)))/(\log (1+I))
A = P * (1 - (1/(1 + I)**N))/I
P = A * (I/(1-(1/(1+I)**N)))
P = A * (I / (1 - (1 / (alog (N * log (1 + I))))))
A = P * (1 - (1/(alog(N * log(1 + I)))))/I
N = (\log (P/(P-A*I)))/(\log (1+I))
Sequence:
01 X = 0
02 M = defined from program input
03 Go to next debt record
04 m = defined in debt record
05 P = m
06 A = defined in debt record
07 I = defined from debt record
08 N = (\log (P/(P-A*I)))/(\log (1+I))
09 \text{ Na} = N - X
10 An = P * (1 - (1/(alog (Na * log (1 + I))))) / I
11 Pn = m+M
12 Nn = (log(Pn/(Pn-An*I)))/(log(1+I))
13 Y = ((Nn * Pn) + (m * X)) - A
14 Yn = Yn + Y
15 X = X + Nn
16 M = Pn
17 If no more debt, goto 18. Else, goto 03
18 S = Yo - Yn
```

## **CLAIMS**

What is claimed is:

ì	1. I	n a fi	nancial analysis system, a method of extinguishing debt, comprising the				
2	steps of:						
3	(,	A)	determining monthly debt spending;				
4	(1	B)	enumerating monthly debt requirements;				
5	(0	C)	evaluating minimum required payment for each such enumerated debt;				
6	(1	D)	evaluating interest rate for each such enumerated debt;				
7	(1	E)	identifying the debt with the highest interest rate;				
8	(1	F)	determining the difference between the monthly debt spending and the				
9	sum of the minimum required payments;						
10	(0	G)	paying the minimum required payment for each such enumerated debt;				
11	(I	H)	paying the difference between the monthly debt spending and the sum				
12	of the m	inimu	im required payments to such identified debt with the highest interest				
13	rate;						
14	(1)	<b>(</b> )	maintaining monthly debt spending constant, and				
15	(J	n)	performing steps (B) through (H) until all debt is extinguished.				
1	2. In a financial analysis system, a method of allowing a user to build equity in						
2	real prop	erty,	mortgaged by such user, while maintaining constant the amount of				
3	discretionary spending, the method comprising the steps of:						
4	(A	<b>A</b> )	determining monthly debt spending, such debt spending including at				
5	least one mortgage payment;						
6	(E	3)	enumerating monthly debt requirements;				
7	(C	C)	evaluating total debt burden for outstanding debt;				

8 (D) obtaining a second mortgage such that the monthly payment for such
9 second mortgage is less than the sum of monthly payments for at least a portion of
10 such monthly debt requirement;

- 11 (E) applying the proceeds of such second mortgage to extinguish at least a
  12 portion of such monthly outstanding debt;
- 13 (F) identifying the remaining debt instrument with the highest interest rate;
- 14 (G) determining the difference between the monthly debt spending and the
  15 sum of the minimum required payments remaining after such portion of such monthly
  16 outstanding debt has been extinguished;
- 17 (H) paying the minimum required payment for each such enumerated debt;
- 18 (I) paying the difference between the monthly debt spending and the sum
  19 of the minimum required payments remaining after such portion of such monthly
  20 outstanding debt has been extinguished to such identified debt with the highest
  21 interest rate;
- 22 (J) maintaining monthly debt spending constant, and
- 23 (K) performing steps (F) through (J) until all debt is extinguished.
- 1 3. The method of Claim 2, further comprising the step of:
- allocating at least a portion of such second mortgage in a lump sum to
  establish an Emergency Fund.
- 4. The method of Claim 3, in which

1

- the value of such Emergency Fund is equal to at least the value of such monthly debt requirement.
  - 5. The method of Claim 3, further comprising the step of:
- allocating at least a portion of the difference between the monthly debt
- 3 spending and the sum of the minimum required payments remaining after such

4 portion of such monthly outstanding debt has been extinguished to such Emergency

- 5 Fund.
- 1 6. The method of Claim 5, in which
- the step of allocating at least a portion of the difference between the monthly
- 3 debt spending and the sum of the minimum required payments remaining after such
- 4 portion of such monthly outstanding debt has been extinguished to such Emergency
- 5 Fund is no longer included when the value of such Emergency Fund is at least six
- 6 times the value of such monthly debt requirement.
- 7. The method of Claim 3, further comprising the steps of:
- determining such users total annual income, and
- allocating at least a portion of the difference between the monthly debt
- 4 spending and the sum of the minimum required payments remaining after such
- 5 portion of such monthly outstanding debt has been extinguished to a budget for life
- 6 insurance premium payments.
- I 8. The method of Claim 7, in which
- the face amount of insurance is at least twelve and one-half times the users
- 3 total annual income, provided such users total annual income is not zero, and
- 4 the face amount of insurance is at least \$50,000, if such users total annual
- 5 income is zero.
- 1 9. The method of Claim 3 further comprising the step of:
- allocating at least a portion of the difference between the monthly debt
- 3 spending and the sum of the minimum required payments remaining after such
- 4 portion of such monthly outstanding debt has been extinguished to a budget for
- 5 Retirement Savings.

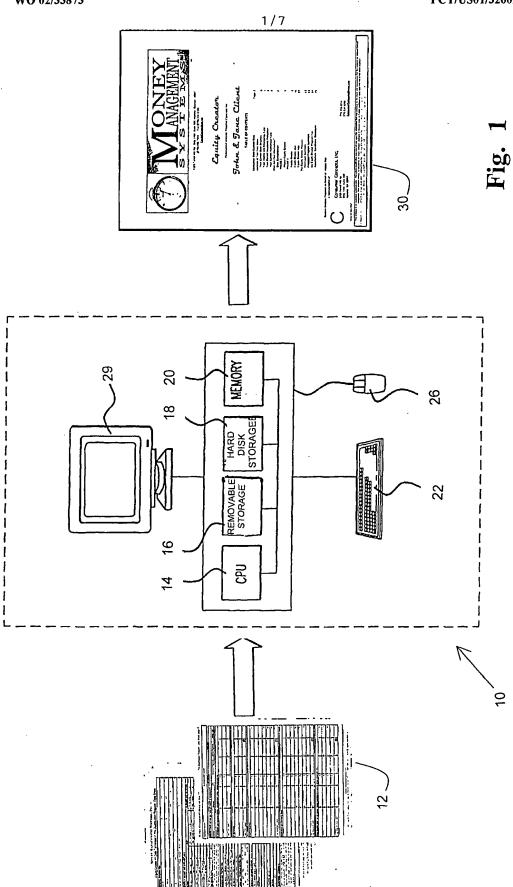
1 10. A computerized system for management and analysis of a financial plan,
2 comprising:

- 3 (A) means for inputting customer related data into such computer system,
- 4 such customer data including:
- 5 (i) financial data concerning monthly income, and
- 6 (ii) financial data concerning monthly debt spending including, for
- 7 each debt
- 8 (1) total amount owed;
- 9 (2) interest rate;
- 10 (3) minimum monthly payment required; and
- 11 (4) actual monthly payment;
- 12 (B) means for storing such customer related data;
- (C) means for calculating a margin;
- 14 (D) processor means for allocating such margin to a selected debt until the
- total amount owed for such debt is zero;
- 16 (E) means for generating reports of such financial plan, and
- 17 (F) display means for displaying such generated reports.
  - 1 11. The system of Claim 10, wherein such selected debt comprises the debt with
- 2 the highest interest rate.
- 1 12. The system of Claim 11, in which such processor means allocates such margin
- 2 to each debt, one at a time, according to interest rate from highest to lowest.
- 1 13. The system of Claim 12, in which such processor means further comprises:
- 2 means for determining customer emergency fund needs requirements.
- 1 14. The system of Claim 13, in which such processor means further comprises:
- 2 means for determining customer income protection needs requirements.

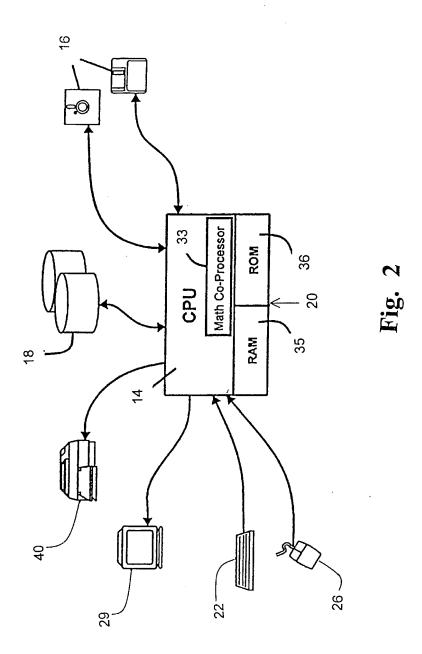
1	15. The	system o	r Cla	im 14, in which such processor means further comprises:			
2	mear	s for det	ermi	ning customer retirement savings needs requirements.			
Ī	16. The	The system of Claim 15, in which such processor means allocates a portion of					
2	such margin toward satisfying						
3		such e	merg	ency fund need;			
4		such i	ncom	e protection needs; and			
5		such r	etirer	nent savings needs.			
1	17. The s	system o	f Clai	im 10, wherein such means for displaying reports is selected			
2	from the gro	om the group consisting of:					
3		(i)	mea	ins to graphically display such reports			
4		(ii)	mea	uns to textually display such reports, and			
5		(iii)	com	abinations of (i) and (ii).			
1	18. A co	mputer i	mplei	mented system for helping a customer consolidate debt and			
2	implement a	plement a comprehensive financial needs analysis program, comprising:					
3	(A)	means	for	obtaining financial information about such customer,			
4	including						
5		(i)	fina	ncial data concerning monthly income, and			
6		(ii)	fina	ncial data concerning monthly debt spending including, for			
7	each debt						
8			(1)	total amount owed;			
9			(2)	interest rate;			
10			(3)	minimum monthly payment required; and			
11			(4)	actual monthly payment;			
12	(B)	means	for o	determining a strategy to create a margin of funds from a			
13	preexisting n	xisting monthly allocation of money;					

14 (C) means for determining a strategy for establishing an emergency fund;

- 15 (D) means for determining a strategy for identifying income protection
- 16 measures;
- 17 (D) means for determining a strategy for building a retirement fund, and
- 18 (E) means for generating a report illustrating such strategies.
- 1 19. The computer system of Claim 18, in which such strategy to create a margin
- 2 of funds from a preexisting monthly allocation of money further includes allocating
- 3 such margin to each debt, one at a time, according to interest rate from highest to
- 4 lowest.
- 1 20. The computer system of Claim 19, in which
- such strategy for establishing an emergency fund further includes allocating a
- 3 portion of such margin toward such emergency fund;
- 4 such strategy for identifying income protection measures includes allocating a
- 5 portion of such margin toward such income protection; and
- such strategy for building a retirement fund includes allocating a portion of
- 7 such margin toward a retirement savings fund.



SUBSTITUTE SHEET (RULE 26)



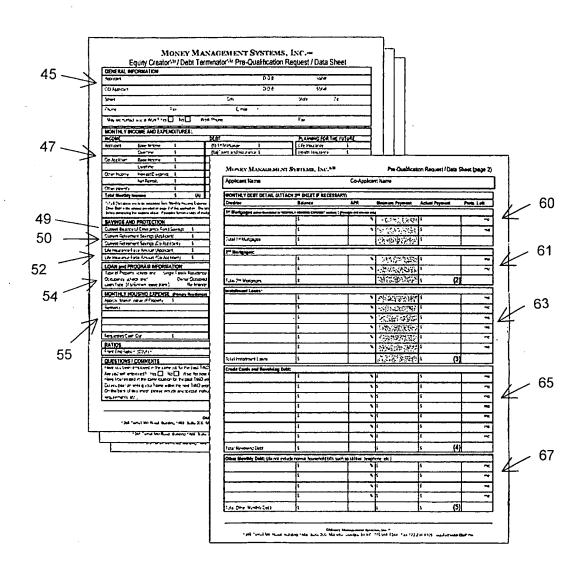


Fig. 3

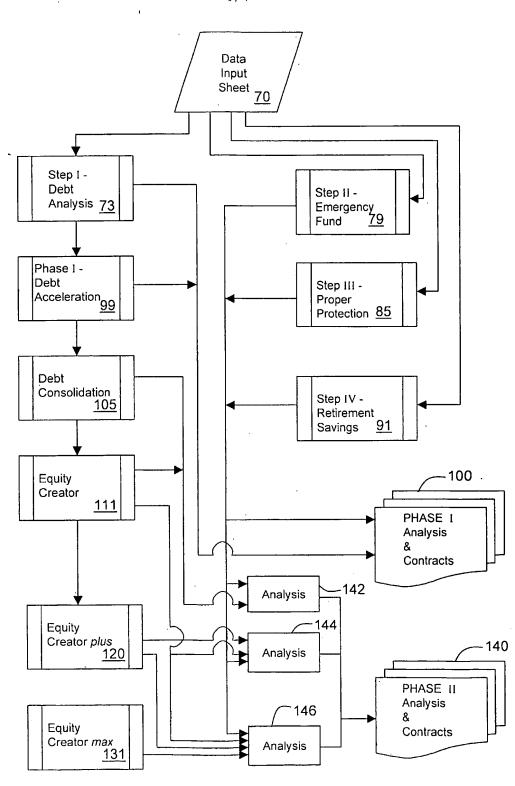
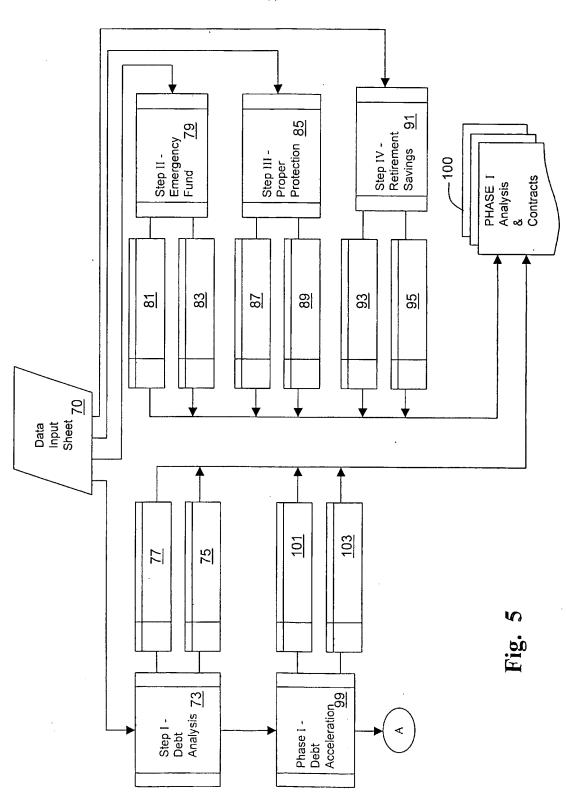


Fig. 4

**SUBSTITUTE SHEET (RULE 26)** 



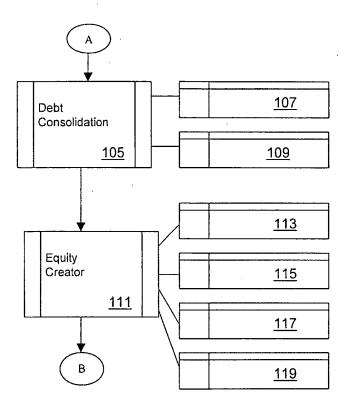


Fig. 6

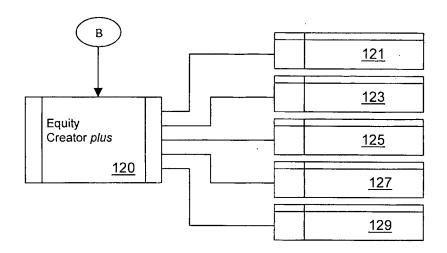


Fig. 7

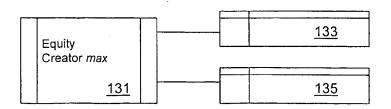


Fig. 8